

AMENDMENT OF CLAIMS

(Claims 1-20, canceled)

(Claim 21, currently amended)

21. A distributed computing method comprising the steps of:

creating a plurality of software entities ("molecules") each of which is to be deployed in a "logic web" in a remote computing environment and is ~~configured with signal handling software micro-components for sending and receiving communication signals to or from a source externally of the respective molecule, said signal handling micro-components of each molecule being operatively connected to~~ operative to generate its software micro-components forming the molecule autonomously ~~a selected one of a plurality of method handling software micro-components for processing input data by a respective selected method in the given remote computing environment in which said molecule is deployed and providing a resulting output of processing the input data;~~

deploying wherein a first molecule is created with a method handling software component for performing a respective selected first data processing method on a respective one of a plurality of remote computing environments, together with a library containing a plurality of method handling software components for a corresponding plurality of data processing methods which may be selectively invoked in the remote computing environment; and

wherein each said first molecule deployed in its respective computing environment invokes thereupon invokes a next subsequent molecule with a method handling software component retrieved from the library for implementing a next selected data processing method in the remote computing environment, and similarly for subsequent molecules, and

enabling at least one of which is selected in response to receipt of the deployed molecules in the remote computing environment to receive a communication signal from the an external communication source so as to guide the generation of itself or another molecule based on the signal received from the external communication source, thereby creating a allowing the "logic web" of molecules of successive performing their respective data processing methods in successive

~~layers of incremental processing steps to be~~ incrementally extended ~~said logic web~~ “on the fly” and guided in response, at least in part, to a communication signals from the external communication source.

(Claim 22, previously presented)

22. A distributed computing method according to Claim 21, wherein each logic web in each computing environment performs its data processing functions in its respective computing environment autonomously, and returns an output which is desired to be obtained from that computing environment.

(Claim 23, previously presented)

23. A distributed computing method according to Claim 22, wherein each logic web returns the output for its respective computing environment to an external monitoring entity, and said external monitoring entity combines the outputs from the other computing environments to obtain a combined output of distributed computing.

(Claim 24, previously presented)

24. A distributed computing method according to Claim 23, wherein the computing environments are a plurality of computing sites distributed on a network, and the logic webs return their outputs by sending signals on the network.

(Claim 25, previously presented)

25. A distributed computing method according to Claim 23, wherein the computing environments are a plurality of computing resources in an array of processing units (CPUs) operated in parallel in a parallel processing environment.

(Claim 26, previously presented)

26. A distributed computing method according to Claim 21, wherein said software micro-components include a signal handler, at least one input handler, at least one output handler,

an interface handler, and at least one method handler for an associated method, said at least one input handler being operative for queuing input data, said interface handler being operative for determining when a predefined input condition for required input data to be received by said input handler is fulfilled and then invoking said method handler, said method handler being operative for invoking said associated method for processing the input data, and said at least one output handler being operative for outputting a result of the processing of input data by said method.

(Claim 27, currently amended)

27. A distributed computing method according to Claim 21, wherein said software micro-components are stored in ~~said a~~ library installed in the remote computing environment for run time use, and during run time a logic web is deployed in ~~a~~ the given computing environment by invoking a first molecule generated with software micro-components to be retrieved from the library and executed in the given computing environment, and said first molecule invoking one or more other molecules to incrementally extend said logic web “on the fly”.

(Claim 28, currently amended)

28. A distributed computing method according to Claim 21, wherein said creating step includes creating ~~molecules having a handler function for creating~~ next molecules in successive layers of incremental processing steps.

(Claim 29, currently amended)

29. A distributed computing method according to Claim 21, wherein said creating step includes creating ~~a~~ molecules having a built-in handler function for performing a clean-up of its functions when the molecule is to be terminated.

(Claim 30, currently amended)

30. A distributed computing method according to Claim 21, wherein said creating step includes creating ~~a~~ molecules having a micro-component handler type for recording information on the state of its micro-components ~~handlers~~ and signaling such state information externally through ~~said a~~ signal handler micro-component.

(Claim 31, currently amended)

31. A distributed computing method according to Claim 21, wherein said software micro-components include signal handler micro-components that can receive signals for and has a micro-component handler type for dynamically reconfiguring the micro-components ~~handlers~~ of the molecule while it is in existence to perform a processing task.

(Claim 32, currently amended)

32. A distributed computing method according to Claim ~~24~~ 26, wherein said interface handler includes a handler type for providing the molecule with the characteristic of autonomously waiting, looking, and proceeding with said associated method for processing the input data by waiting until said input handler indicates that the predefined input conditions are present before invoking said method handler for the associated method.

(Claim 33, currently amended)

33. A distributed computing method according to Claim ~~24~~ 26, wherein said interface handler includes a plurality of handler types for determining when respective predefined input conditions for the presence of respectively required data is fulfilled and for invoking respective ones of a plurality of method handlers and associated methods.

(Claim 34, currently amended)

34. A distributed computing method according to Claim ~~24~~ 26, wherein said input handler is selected from one of a plurality of input handler types corresponding respectively to a plurality of different data source types.

(Claim 35, currently amended)

35. A network computing method comprising the steps of:
creating a plurality of software entities ("molecules") each of which is to be deployed in a "logic web" in a remote computing environment and is ~~configured with signal~~

~~handling software micro-components for sending and receiving communication signals to or from a source externally of the respective molecule, said signal handling micro-components of each molecule being operatively connected to~~ operative to generate its software micro-components forming the molecule autonomously ~~a selected one of a plurality of method handling software micro-components for processing input data by a selected method in the given remote computing environment in which said molecule is deployed and providing a resulting output of processing the input data;~~

~~deploying wherein a first molecule is created with a method handling software component for performing a respective selected first data processing method on a respective one of a plurality of remote computing environments, together with a library containing a plurality of method handling software components for a corresponding plurality of data processing methods which may be selectively invoked in the remote computing environment, wherein the remote computing environment is one of a plurality of environments~~ are network computing sites distributed on a network; and

~~wherein each said first molecule deployed in its respective computing environment invokes thereupon invokes a next subsequent molecule with a method handling software component retrieved from the library for implementing a next selected data processing method in the remote computing environment, and similarly for subsequent molecules, at least one of which is selected in response to receipt of a communication signal from the external source, thereby creating a~~ allowing the “logic web” of molecules of successive data processing methods in successive layers of incremental processing steps to be incrementally extended ~~said logic web “on the fly”; and~~

~~providing enabling receipt of a communication signal from a control~~ an external communication source on the network at to each any given logic web at each any given network computing site to command guide, at least in part, the invoking of one or more molecules of said logic web for its performance of one or more selected data processing functions in its extension “on the fly” in its respective computing environment autonomously, and return of an output which is desired to be obtained from that network computing site.

(Claim 36, currently amended)

36. A network computing method according to Claim 35, wherein each of a plurality of logic webs returns ~~the~~ an output for its respective network computing site to a network monitoring entity, and said network monitoring entity combines the outputs from the network computing sites to obtain a combined output for the network.

(Claim 37, previously presented)

37. A network computing method according to Claim 36, wherein the network is a network of networks ("the Internet"), and the logic webs are deployed at websites on the Internet to compute data autonomously from the websites and return their outputs to the network monitoring entity.

(Claim 38, currently amended)

38. A network computing method according to Claim 35 36, wherein said software micro-components include data handlers for processing data streams from different data sources and providing the resulting processed data outputs to the network monitoring entity.

(Claim 39, previously presented)

39. A network computing method according to Claim 38, wherein said software micro-component data handlers of the molecules are configured to process respective media data streams in different formats from different media data sources and provide the media data streams reformatted to a desired file type to the network monitoring entity.

(Claim 40, previously presented)

40. A network computing method according to Claim 39, wherein the network monitoring entity performs a high level function of monitoring different media data streams published in different formats from different sources on the network.